

(Journ. N. Y. Ent. Soc., vol. 26, p. 67, 1918) has pointed out this fact and expressed the possibility of the Japanese insect being the same as the European form. A study of authentic specimens of both species soon revealed the differences above described and the species is consequently renamed as above.

THE MUSCOID GENERA PSEUDEUANTHA AND URAMYIA

(Diptera)

By J. M. ALDRICH

These closely related genera include both neotropical and nearctic species, all of which readily run to *Macquartia* in the table of genera in Coquillett's Revision of 1897. This use of *Macquartia* appears to have been the traditional sense, since one of the National Museum specimens placed by Coquillett in *M. pristis* had already been labeled "*Macquartia* sp." by Brauer and Bergenstamm. But Brauer himself had restricted the genus to a different group by designating *Tachina dispar* Fall. as type in 1893 (Verh. Z. B. Ges. Wien, 486); this species has the frontals extending below the base of the antennæ and the parafacials are heavily pilose. In this restricted sense *Macquartia* is not North American.

The two genera herein considered have the following characters in common: frontal bristles extending only to the base of the antennæ; eyes densely hairy; face receding; vibrissæ at edge of mouth, not approximated; parafacials bare, narrow; facial ridges with only a few small hairs below; palpi and proboscis normal; antennæ reaching nearly to vibrissæ, third joint about three times the second (two in *halisidotæ*), arista slightly or distinctly pubescent. Venation without unusual features, first posterior cell ending somewhat before the wing tip, open, third vein with a few hairs at base.

The chaetotaxy is strikingly uniform: ocellars directed forward but often small, verticals in the male hardly distinguishable from the postorbital row of hairs, but in the female well developed; male without reclinate frontals, the female with

the stout upper pair reclinate, the second slightly so; posterior dorsocentrals 3 large; anterior acrostichals 1 or 2 large, none immediately before the suture; scutellum with a long apical pair, one still longer at side, and one at base higher up, as well as a smallish, variable discal pair; sternopleurals 2 or 3; first abdominal segment usually with a large median marginal pair, second to fourth abdominal segments always with discals as well as marginals.

In the male sex the two genera are readily separated, since in *Pseudeuantha* the abdomen is normal, while in *Uramyia* the fourth segment is acutely produced dorsally beyond the genitalia into a more or less tail-like process, and the genitalia are somewhat concealed in the anterior part of an ovate cavity under the tergite. The peculiar "tail" is best developed in *producta*; as it is variable and decreases through the three species I have seen, and has no counterpart in the female, it should not be given too much taxonomic value.

But little has been published about the females of the tropical species, and they are not certainly identified in the National Museum collection. Those of *Uramyia* do not have any corresponding process, and at present the genera are difficult to separate in this sex.

Genus *Uramyia* Robineau-Desvoidy

Robineau-Desvoidy, Myodaires, 1830, 204. Sole species, *U. producta*, new.

Macquart, Dipt. Exot., Suppl. i, 1846, 296 (sep. 168) (*Aporia*, sole species, *A. quadrimaculata*, new).

Schiner, Novara Reise, 1868, 319 (*Aporia*).

Bigot, Bull. Soc. ent. France, 1885, xxxiii (*Oxydextia*, sole species, *O. acuminata*, new).

Van der Wulp, Tijdsch. v. Ent., xxx, 168, 1887; Biologia, Dipt., ii, 1891, 251.

Brauer u. Bergenstamm, Zweifl. Kais. Mus., iv, 1889, 130; vi, 1893, 135 (*Uramyia* and *Aporia*).

Townsend, Muscoid Flies, 1908, 67 (*Neaporia*, new name for *Aporia*, preoccupied). Proc. Ent. Soc. Wash., xiv, 1912, 48 (*Paraporia*, new name for *Neaporia*, preoccupied); Proc. U. S. N. M., vol. 49, p. 626, 1916 (*Uromacquartia*, type *halisidotae*, new).

TABLE OF SPECIES

- Abdomen narrow, the second segment only about as wide as long (neotropical).....*producta* Robineau-Desvoidy
- Abdomen of usual width, second segment evidently wider than long.
- Third antennal joint three times the second, arista with evident pubescence on basal two-fifths (neotropical),
quadrinaculata Macquart
- Third antennal joint twice the second, with very short pubescence (nearctic).....*halisidotæ* Townsend

Uramyia producta Robineau-Desvoidy.

Robineau-Desvoidy, Myodaires, 1830, 216, male (as female).—Brazil.

Schiner, Novara Reise, 1868, 320, male (*Aporia caudata*).—South America.

Bigot, Bull. Soc. ent. France, 1885, xxxiii (*Oxydextia acuminata*).—Mexico.

Brauer u. Bergenstamm, Zweifl. Kais. Mus. iv, 1889, 130; v, 1891, 133, syn.; vi, 1893, 135.—Central and South America.

Van der Wulp, Biologia, Dipt., ii, 1891, 251, pl. vi, f. 6; Tijdsch. v. Ent., xxx, 168, 1887, figs. (the second as *acuminata*). Cordoba and Jalapa. Mex.

Townsend Bull. Amer. Mus. N. H., xxxv, 15.—Brazil?

Represented in the National Museum by two males; one from San Bernardino, Paraguay (Fiebrig, collector), the other from the Williston collection, through the American Museum of Natural History, presumably collected in Brazil by H. H. Smith.

Van der Wulp, in 1887, believed that *acuminata* is distinct from *producta*; the difference, however, was in the length of the fourth abdominal segment of the male, which is pretty certainly a highly variable matter here, as it undoubtedly is in *halisidotæ*.

Uramyia quadrinaculata Macquart.

Macquart, Hist. Nat. Dipt., Suppl. i, 1846, 297 (sep. 169), pl. xv, f. 7, male (*Aporia*).—Colombia.

Schiner, Novara Reise, 1868, 319, male and female (id.).—Colombia.

Brauer u. Bergenstamm, Zweifl. Kais. Mus., iv, 1889, 130, fig. 222, male and female.—South America.

Van der Wulp, *Biologia*, Dipt., ii, 1890, 130, male (*Macquartia acuminata*, new).—Guerrero, Mexico, 7000-8000 ft.

Represented in the National Museum by two males; one labeled "Piches & Pirene Vs. Peru, 2000-3000 ft. Soc. Geog. de Lima;" the other Chapada, Brazil, from the Williston collection, through the American Museum (H. H. Smith, collector).

Two females from South America may represent one or both of the preceding species, but I am unable to decide what male if any in the collection they belong to. One is from Sao Paulo, Brazil (Dr. Lutz), the other from Rio Charape, Peru (Townsend). They have the arista almost without pubescence, and in both the wings are considerably infuscated.

Uramyia halisidotæ Townsend.

Townsend, *Proc. U. S. N. M.*, 49, 1916, p. 626, male (*Uromac-quartia*). Aurora Mills, Ore.

Coquillett, *Revision Tachinidæ*, 1897, 64, included the type under *Macquartia pristis* Wlk.

Represented in the National Museum by the type male from Aurora Mills, Oregon, which was reared from *Halisidota argentata*; two females bred in the same lot but not mentioned as types by Townsend; one female, Siskyou County, California; one male, Stanford University, California, bred from *Halisidota argentata* by R. Patterson, March 8, 1898; one male, Monterey, California, reared from *Malacosoma* sp. by Geo. A. Coleman, June 1, 1904. I have also compared two males and three females from Corvallis, Oregon, one pair in my collection, the other sent by Dr. J. Bequaert; all these last I believe came from Professor Lovett originally.

The length of the tail-like prolongation of the abdomen is highly variable. It is shortest in the type specimen. The females differ very little from those of *Pseudeuantha pristis*; the only character I could find was the presence of three sternopleurals, *pristis* appearing constant with two. In separating them on this character I had to transfer to *pristis* one female that Townsend had placed in *halisidotæ*. It would seem from this resemblance that *Pseudcuantha* can hardly be

maintained as a separate genus from *Uramyia*, but until the females of the tropical forms are better known I would not go farther in combining the genera.

Unidentified species of *Uramyia*.

nitens Schiner, Novara Reise, 1868, 320 (Aporia)—South America.

Brauer u. Bergenstamm, Zweifl. Kais. Mus., v, 1891, 435, gen. ref.

Genus *Pseudeuantha* Townsend

Townsend, Proc. U. S. N. M., vol. 49, 1915, 416 (type and sole species, *P. linellii*, new = *Tricholyga caloptera* Bigot); vol. 56, 1919, 560 (*Anaporia*, type and sole species, *Aporia limacodis* Tns., = *Dexia pristis* Walker).

Coquillett, Revis. Tachin., 1897, 64 (*Macquartia* R. D.)

Adams, in Williston's Manual, 1918, 367 (id.).

Van der Wulp, Biologia, Dipt., ii, 1890, 128 (id.).

TABLE OF SPECIES

- a. Wings bicolored, yellow at base, blackish distally.
 - b. Anterior acrostichals only one pair; yellow of wing ending transversely at tip of auxiliary vein (Peru),
octomaculata Townsend.
 - bb. Anterior acrostichals two pairs; yellow of wing ending diagonally, reaching on the costa beyond the tip of the first vein (Mexico).....*caloptera* Bigot.
- aa. Wing hyaline or with only brown coloration.
 - b. Abdomen including first segment reddish, with median dorsal black stripe; anterior crossvein not infuscated (Florida).....*rubripes*, n. sp.
 - bb. Abdomen with first segment black, the crossvein infuscated (Mexico).....*versicolor* Van der Wulp
 - bbb. Abdomen black.
 - c. Wing-veins bordered with brown.
 - d. Venter with long yellow bristles on basal half; three sternopleurals (Mexico).....*setiventris* Van der Wulp.
 - dd. Venter not with yellow bristles; wing infuscated along costa (Mexico).....*venusta* Van der Wulp.
- cc. Wings hyaline.
 - d. With only two sternopleurals.
 - e. Front very narrow in male, eyes almost contiguous, the frontal stripe reduced to a line or entirely obliterated; abdominal tergites 2 and 3 with long erect

- hairs and secondary smaller discals besides the large pair (New England to North Carolina)...*coquilletti*, n. sp.
 ee. Front wider, the frontal stripe always distinct, about as wide as one parafrontal; tergites 2 and 3 with a single pair of stout discals (widespread),
pristis Walker.
 dd. With three sternopleurals.....*johnsoni* Townsend.

In the table *versicolor* and *venusta* have been placed from the descriptions.

Pseudeuantha caloptera Bigot.

- Bigot, Annales Soc. ent. France, 1888, 263, male (as female) (*Tricholyga*).—Mexico.
 Giglio-Tos, Boll. R. Univ. Torino, viii, No. 147, 1893, male; Ditt. dell Messico, iii, 66, 1894, f. 16 (both *Aporia elegans*).—Tuxpango, Mexico.
 Brauer, Sitzungsber. Kais. Akad., cvi, 24, 1897, notes on Bigot's type, referring it to *Aporia*.
 Townsend, Proc. U. S. N. M., 49, 1915, 416 (*linellii*).—Tehuantepec, Mexico.

Represented in the National Museum only by Townsend's type female of *linellii*.

Pseudeuantha pristis Walker.

- Walker, List of Diptera in the British Museum, iv, 1849, 841 (*Dexia*).—Mass. Dipt. Saundersiana, 281, 1852 (*Dexia basalis*).—No locality. Synonymy of the latter by Major E. E. Austen from types, letter, November, 1920.
 Townsend, Psyche, vi, 275, 1892, female (as male) (*Aporia limacodis*).—New York; bred from *Limacodes* sp.
 Coquillett, Revis. Tachin., 1897, 64 (*Macquartia*).—New Hampshire, Massachusetts, District of Columbia, California (for his Oregon material, see *Uramyia halisidotae*).

I have seen the type of *limacodis* in the University of Kansas. I sent to the British Museum a specimen exactly matching one in the National Museum determined as *limacodis* by Townsend; Major Austen kindly compared it with the type of *pristis* and pronounced it the same. At the same time he reported the synonymy of *basalis* (letter, November, 1920).

Male. A robust form with comparatively large genital segments, which give the abdomen a truncated appearance. Black,

the palpi, labella and base of antennæ to arista yellow, knees and tibiæ yellowish, the anterior tibiæ less so. Front at narrowest averaging 0.12 of entire headwidth (five specimens gave 0.11, 0.12, 0.12, 0.12, 0.13); third antennal joint a little bulbous at tip; parafacials about as wide as third antennal joint; bucca about 0.3 the eyeheight; arista very slightly pubescent. Thorax cinereous with changing reflections dorsally; sternopleurals two strong, no trace of a third; pleuræ with only pale pile, the bristles, however, black. Abdomen shining black in most lights on half or more of each segment, the base and in certain lights nearly all the tergite, however, silvery pollinose. First segment with a marginal pair, second with marginal and discal pairs, third with discal pair and marginal row of 8; fourth with discal and marginal rows. First genital segment retracted, hardly visible; second large, black, apically more reddish, nearly bare. Inner forceps minute, united, the base heart-shaped, with long hairs directed backward, and with a slender, drawn-out tip; outer forceps about twice as long, brown, wide at base, tapering to a slender beak-like point that is curved slightly forward, densely hairy on outer side to beyond middle; penis shining brown, very thin in profile, just before its apex giving off in front at right angles a long flat process which curves gently upward and is divided at tip. Claspers not visible in the prepared specimen. Fifth sternite deeply incised, forming two convex lobes, rather prominent, black. Legs black, tibiæ yellowish; front tibiæ with an anterior row of about six even and rather long spines, and with two on outer hind side; middle tibiæ on outer front side with three, the middle largest and lower smallest, also one large inner and three on outer hind side; hind tibiæ with a very uneven row on outer hind side, three on inner hind (the intermediate minute), and two on outer front. Claws and pulvilli all very long. Wings hyaline, third vein with about three hairs at base; fourth vein bent almost at a right angle, occasionally a little angulated.

Female. Smaller; front uniformly narrowed to extreme vertex, where it is about one-sixth headwidth; only five pairs

of frontals. Abdomen in favorable specimens showing a short, shining black, bluntly pointed ovipositor; claws and pulvilli shorter.

Length of male 10.5 mm. (average of five); of female, 7.3 mm. (average of five).

Represented in the National Museum by the following specimens: one male, Falls Church, Virginia, matching the specimen sent to the British Museum; one male Beltsville, Maryland, labeled *Anaporia limacodis* by Townsend and agreeing exactly with the preceding; one male, Glen Carlyn, Virginia (Knab); two males, Lyme, Connecticut (Greene); two females, White Mountains, New Hampshire (Morrison); one same (Mrs. Slosson); one female, New Haven, Connecticut (Champlain); one female, Melrose Highlands, Massachusetts; one female, "ex *Empretia stimulea*," from H. G. Dyar, presumably bred at Yaphank, New York; one female, Virginia, reared from *Euclea cippus* (Koebele, Bureau Ent. No. 357-o, labeled *Exorista blanda* O. S., by Coquillett, and so cited by him in Revis. Tachin., p. 13); two females, East Verde River, Arizona, 4,500 feet (Townsend).

***Pseudeuantha coquilletti*, new species.**

Male. Smaller than the preceding and less robust, with smaller genitalia, which, however, are on exactly the same plan. The color of the pile of the pleura is evidently variable, as in the type it is wholly dark and in another it is dark above, in the others wholly pale as in *pristis*. Width of front in four males, 0.03, 0.04, 0.055, 0.06; average 0.046 of headwidth.

Female. The only differential character that could separate this from *pristis* as far as I now see would be the presence of secondary discal bristles, and this may be variable. One rather robust female taken at Lyme, Connecticut (Greene), has distinct secondary discals; but a pair taken the same day and another male the day after are typical *pristis*. The difficulty is increased by the fact that females of *pristis* are much smaller than their males, so that they agree in size with those of this species, although this has a smaller male than that of *pristis*.

Length of male 8.5 mm. (average of four); of female, 8.7 mm.

Type.—Male, No. 23940, U. S. Nat. Mus., labeled "Mass." and "out in small side black box, May 5, 1895." It had been placed by Townsend in his series of *limacodis*. Paratype males: one "on *Tortricidia flexuosa*, N. Y." (H. G. Dyar); one White Mountains, New Hampshire (Morrison), labeled "*Macquartia* sp." by Brauer and Bergenstamm; one, Canton, North Carolina (Sherman). One female supposed to belong here is from Lyme, Connecticut.

***Pseudeuantha rubripes*, new species.**

Male. Head and thorax black, abdomen and legs except tarsi reddish-yellow, abdomen, however, with a wedge-shaped black dorsal stripe which runs to a point on the fourth segment.

Head shaped as in *pristis*; antennæ reddish nearly to the middle of the third joint, arista very slightly pubescent near base; palpi yellow. Front in the single specimen 0.14 as wide as head; frontal stripe at narrowest slightly wider than para-frontal. Thorax with changeable cinerous pollen above, the sides more uniform; pleuræ with only pale hairs, the bristles black; stenopleurals two, stout. Tarsi black, claws and pulvilli decidedly shorter than in *pristis*. Genital segments not quite so large as in *pristis*, but the fifth sternite with large lobes as in that species. Second and third abdominal tergites with a single pair of stout discals, the first and second underneath with long pale hairs near the median line, as in other species. Wings hyaline, the fourth vein with a short appendage at the bend in the described specimen.

Length 9.6 mm.

Type.—Male, No. 23941, U. S. Nat. Mus.; from Miami, Florida, October 29 (Mrs. C. H. T. Townsend, collector).

***Pseudeuantha johnsoni* Townsend.**

Townsend, *Canad. Ent.*, xxiv, 1892, 81, female (as male) (*Macquartia*).—Pennsylvania.

Coquillett, *Revis. Tachin.*, 1897, p. 64 (*Macquartia*; misidentified, the specimen later described by Townsend as *Xanthocera*

clistoides); p. 96, female (*Exorista isae*).—District of Columbia; bred from *Isa inornata*.

Williston, Manual. 1908, 367, note on Townsend's type (*Macquartia*).

Townsend, Proc. Biol. Soc. Wash., xxviii, 1915, 22, notes misidentification by Coquillett.

I examined the type in the University of Kansas. It is a female, not a male as stated by Townsend, and seems to differ from *pristis* mainly in having three sternopleurals and a more yellowish cast to the pollen over most of the body. Coquillett misidentified it and described it again as *Exorista isae*, as I find from the type; his specimen is teneral and hardly shows any yellowish tinge, the shrinking of its head has brought one pair of frontals a little below the apparent level of the antennal insertion, which probably induced Coquillett to refer it to *Exorista*.

Represented in the National Museum only by the type of *isae*.

***Pseudeuantha setiventris* Van der Wulp.**

Van der Wulp, Biologia, Dipt., ii, 1890, 129, pl. iii, f. 21, male (*Macquartia*).—Orizaba and Guerrero, Mexico, 8,000 feet.

Giglio Tos, Ditt. del Mess., iii, 50, notes (id.),—Solco, Mexico.

Represented in the National Museum by one male from Mexico City (Juan Müller), and one female, San Rafael, Vera Cruz, Mexico (Townsend).

***Pseudeuantha octomaculata* Townsend.**

Townsend, Proc. U. S. Nat. Mus., 56, 1919, 560, male—Huadquina, Peru.

Represented in the National Museum only by the type specimen.

Unidentified species of *Pseudeuantha*.

atrifrons Bigot, Annales, Soc. ent. France, 1888, 259, male (*Macquartia*)—Mexico.

venusta Van der Wulp, Biologia, Dipt., ii, 1890, 130, male (*Macquartia*).—Guerrero, Mexico, 6,000-7,000 feet.

versicolor Van der Wulp, ibidem, male (*Macquartia*).—Guerrero, Mexico, 7,000-8,000 feet.